on the suspension of mason work the trenches on he refilled, repayed or remacadamized, and acreted, as the case may be, and all materials, the service, sand, rock and rubbleh femoved the street immediately thereafter, and in of failure thereof, after due notice has been in writing by the commissioner of public to the contractor, it will be done by the commissioner and the expense thereof dedictions; the payments due or to become due aid contractor. ald contractor.

I masonry shall be covered and protected fronts by and at the expense of the actor to prevent injury from water or from the

FILE AND TIMERE POUNDATION.

(a) Wherever piles are required for founda-tions or elsewhere, they shall be furnished of good, sound pine or spruce, free from shakes. They shall be not less than twelve inches diameter at the butts, properly sharpened and shod when re-quired, and shall be driven with a hammer of not less than two thousand pounds in weight, and with a fall not to exceed fifteen feet in height, and driven until the nile shall not vield more and driven until the pile shall not yield more than one-half inch under the blow. The tops to be saws or cut off truly and evenly to the grade furnished. The bark in all cases to be stripped or taken off. taken off.

(b) When sheet-pilling is necessary and intended

(b) When sheet-piling is necessary and intended to remain, it shall be furnished of good pine or spruce plank, of the length, width, and thickness shown on the plan of the work; it shall be sound, free from cracks, shakes, and sap-wood, and driven to the depth and in the manner required.

The plank shall be tongued and grooved, if necessary to the width and depth shown. The plank shall be driven with the ram, so as not to crack or split. Where sheet-piling is rendered necessary, and used only in prosecuting the work, no allowance will be made therefor, and it shall in all cases be drawn as the work progresses, unless otherwise ordered by the said commissioner, in which case the sheet-piling so ordered to be left in the trench will be measured and allowed for at the same rate as foundation plank.

(a) Foundation timber of good pine or spruce shall be furnished and laid, where required, all as shown on the plan of the work. The timber shall be correct and first progress or

and washers.

(b) Foundation plants of good pine or spruce and washers.

(b) Foundation plants of good pine or spruce and its furnished and laid in the manner shown on the plan of the work. They shall be of the length, width and thickness there shown, and treennised, as above stated, or spiked, as the engineer may select, to the foundation timbers with the best quality of wrought-tron nails, of spikes, of the size and length thereon specified, and at such points and in such numbers as may be designated.

(c) When it may be seen the contraction of the size and length thereon specified. When it may be necessary to lay foundation is or plank, they shall be of the kind and ty above described, and cut and laid in the ver destarted.

der.

(c) All pipes of a diameter of twelve inches and

hes in length. Each pipe having an opening molded into it ingth. e, of whatsoever kind, must be fitted

the work, and necurred pipe snail exceed sixted feet in length.

(j) Pipes having six-inch spars, with hubs moded thereon for house connections, shall be furnished and laid at such points as the commissioner of public works may designate, in front of each building on the line of the sewer, and where there are no buildings, opposite each lot front, at an average distance apart of seven and one half feet. (except at intersecting streets.) The spurs are to be closed with approved vitrified stoneware covers, free of charge. re to be closed with approved vitrined stoneware vore, free of charge.

(A) Branch pipes and house-connection drains, herever designated, shall be furnished and laid the size and form, and at the points shown on us plan of the work, and closed with a bulkhead brick not less than eight inches in thickness, hen not immediately used, or an approved stone

of the work, and closed with a bulkhead not less than eight inches in thickness, immediately used, or an approved stone ware cover, free of charge. The house in drains, when required, are to be example of the close that of the sewer.

In case it be necessary to remove the said tracks, or any portion thereof, the said company or companies will be notified by the commissioner of public works to remove the same within a specified time; and the contractor shall not interfere with the said tracks, or any portion thereof, until the spin on the plan of the work.

The contractor will be required to preserve the commissioner of public works to the commissioner of public works to the commissioner of public works to remove the said work, until the expiration of the time specified in said notice. The laws a depth of at least three inches to the shoulder of the pipe on which led, and shall have a first three times.

S. (a) The carriageway on the line of work to regraded and repayed or remacadamized and recovered as the case way be to the extent. in drains, when required, are so a point two feet inside of the curbs, on a c same as that of the sewer.

so farnished and laid of the sizes and farnished and laid of the sizes and

shall elect to use hub and spice pipe, they shall be furnished in all cases similar and equal in size, quality and kind to those above described. The hub shall have a depth of at least three inches from the shall have a depth of at least three inches from its face to the shoulder of the pipe on which it is moided, and shall have an interior diameter than the exterior diameter of the pipe which is to be fitted into it.

(a) In ease the said commissioner shall chose the fitted into it.

(a) In ease the said commissioner shall chose to fitted into it.

(b) It is moided, and shall have an interior diameter than the exterior diameter of the pipe which is to be fitted into it.

(a) In ease the said commissioner shall chose to be fitted into it.

(b) It is moided, and shall have an interior diameter than the exterior diameter of the pipe which is to be fitted into it.

(a) In ease the count of which the said is more than two inches greater than the exterior diameter of the pipe which is to be fitted into it.

(a) In ease the count of the pipe which is to be fitted into it.

(b) It is moided, and shall have an interior diameter than the exterior diameter of the pipe which is to be fitted into it.

(a) In ease the said commissioner shall chose the fitted into it.

(a) In ease the said commissioner shall chose the fitted into it.

(a) In ease the said commissioner shall chose the said into it.

(a) In ease the said commissioner shall chose the said into it.

(b) It is moided, and shall have a minterior diameter than the contractor will be required and secondary than the contractor will be required and secondary than the contractor will be required necessary sever.

(b) It is moided, and shall have an interior diameter than the contractor which the said contractor will be required necessary sever.

(b) It is moided, and shall have an interior diameter than the contractor which the said contractor will be required necessary sever.

(c) It is moided, and shall have an interior diameter than the caterior diameter than the ca

and true in line and grade throughout, according to the lines and grades furnished from time to time. The ends of the pipes shall shut against each other, and in such manner that there shall be no shoulder or unevenness of any kind along the bottom half of the swers on the inside. be no shoulder or unevenness of any kind along the bottom hall of the sewers on the incide.

(b) Each joint, as the pipes are laid, is to be fitted with a collar or ring which shall lap equally the ends of such abutting pipe; the lower shalf of the said collar shall in all cases be whole and unbroken and the upper half shall not be more than two pieces; the space between the ring and the pipes is to be as uniform as possible, and to be thoroughly filled with the best hydraulic cement mortar, made of equal parts of doment and clean, sharp sand, thoroughly mixed dry, and water enough alterward added to give it proper consistency and in small quantities, and need as soon as made; the joint is to be carefully wriped and pointed inside and out, and all mortar that may be left inside to be thoroughly cleaned jout, and the pipe left clean and smooth throughout. When required strips of pine or spruce plank

When the pipes are in place, earth shall be said contractor (c) When the pipes are in place, earth shall be filled in in the manner provided in sections 10 to filled in in the manner provided in sections 10 to filled in in the manner provided in sections 10 to fill be filled around so as to prevent the bipe shall be filled around so as to prevent the figure of the joints.

(d) All pipes, previously to their being lowered in the same, or from the action of the same.

Hainmer-wrought blusstone are to be furnished and laid, of the form and thickness required, as shown on said plan.

A cast-iron man-hole head and cover, free from imperfections, and thoroughly cleaned, and in dimensions, weight and quality of iron, and in all respects similar to the pattern adopted and furnished by the commissioners of public works, and now exhibited at this office, is to be fitted to each of the above-described man-holes. And it is hereby expressly agreed that any imperfect man-hole head or cover, which may be brought upon the work, shall be immediately broken up by the inspector in charge.

(6) Brick man-holes shall be worked in the arch of the brick sewers, at such points in the line bi the sower as the said commissioner may direct, of the size, form, thickness, and in the manner shown on the plane of such work en file in the office of said commissioner, and brought up to within tweive inches of the arch of the cellablished grade of the street at that point. The work in all respects to be of the quality above described. To man-hole is to be fitted with wrought-tron bars for steps and cast-fron man-hole head and cover, as above described man-holes, whether in brick or pipe-sewers, are in all cases to be fully and completely built and fitted with their covers, as the work progresses, and as each is reached; and the sewers will not be allowed to be laid down beyond or in advance of any uncompleted man-hole.

brick or pipe-sewers, are in all cases to be fully and complotely built and fixed with their covers, as the work progresses, and as each is reached; and the sewers will not be allowed to be laid down beyond or in advance of any uncompleted man-hole.

30. Receiving-basins are to be built where shown on the plan of the work, or at such other places as the said commissioners shall, during the progress of the work, from time to time determine, and will be paid for at the prices specified in this contract. The basins are to be on the circular corners or side of the street, as the said commissioner shall direct, and shall be constructed in accordance with the drawing or model to be seen at the office of the said commissioner. Each portion of the basins shall be built of the size and materials designated on said drawing or model. Each basin is to have a granite gutter-stone and head-stone, sound and perfect throughout, free from all seams or imperfections, with bluestone curb and gutter-stones adjoining, cut in accordance with the said drawing or pattern, and fitted with a cast-iron cover of the best quality, and of the weight, size and shape shown in said drawing or pattern, and also a wrought-fron grate-bar, one fuch in diameter. fastened solidly into the said bad-stone, in the manner shown. The said gutterstone and head-stone must be of Maine or Massachusetts granite, finely hammer-iressed, and similar to the sample at the yard, unless otherwise ordered by the said commissioner. A trap of hammer-wrought bluestions of the size and dimensions shown on said drawing or model, is to be built in the basin, in the manner therein shown. The shole to be built and laid in cement-mortar, as described in sections of and I7 of these specifications, and the joints carefully struck on the inside. In case the joints carefully struck on the inside. In case the joints carefully struck on the inside. In case the joints carefully struck on the inside. In case the joints carefully struck on the inside. In case the joints carefully stru

said sewers, and the sum of two dollars per runhing foot will be allowed for the part so rebuilt
or relaid.

52. (a) The said commissioner shall have the
right to connect any sewer or sewers herein described, or to grant permits to any person or persons to make connections therewith, at any time
before it is finally completed; and said contractor
shall not interfere with or place obstructions in
the way of such persons as may be employed in
building such new sewer or sewers, or in making
such connections; no extra allowance will be
made to the said contractor on account thereof.
(b) In case the lines of the proposed work shall in
timersect with any sewer connections for which
said commissioner, the same shall be extended to
and reconnected with the new work as it prod greases, in the manner and of the materials
allowed by the said commissioner, under the
tions, and at the expense of the contractor; but
in on new connections or drains will be allowed to be
made or joined to the said sewer or sewers without a permit therefor has been duly issued by the
said commissioner, and which permit shall be exhibited in all cases to the inspector in charge of
the work.

33. All the paving and macadamization stones
necessary to be removed, together with all rock,
earth or sand taken from the trenches shall be in re
such parts of the carriageway, or the vicinity
thereof, as the engineer in charge of the work le
shall direct; and in all cases a passageway on the
sidewalks, of not less than three feet in width, we
shall be preserved free from all obstructions, in
the manner provided for in section 4 of these specifications. In the progress of the work the contractor will be required to presorre from needless
obstruction the carriageway on one side of the line du
of proposed work, and also to afford the necessary
facilities to the company or companies owning
rail-tracks on the line of the work, or to their
agents in the preservation of the same from in
injury, either by removal or otherwise, without exretrictin

manner before described.

36. The whole of the regrading and repaving, or remacadamizing and reconcreting is to be done to the satisfaction of the engineer, (which shall be determined by a certificate to that effect, signed by him, and filed in the office of the Department of Public Works) and the same kept in good repair for a period of six mouths from the date of the last said certificate.

37. During the progress of the work, and until the full completion thereof, the sowers, basins, culverts and connections are to be kept thoroughly cleaned throughout, and left clean.

And upon the full completion of the work embraced in this agreement the contractor will be required to file in the office of the said commissioner a certificate signed by the engineer, to the effect that the stipulations relative to the removal of all surplus materials, earth, sand, rock and rubbish from the line of the work, and relative to the cleaning of the sewers and appurtenances above named, have been faithfully complied with.

38. All iron, water and gas pipes which it becomes necessary to remove, shall be considered as the property of the contravt is given by the Commissioner of Public Works, in writing, to the said contractor, in which case the same shall be removed os otherwise disposed of at the expense of said contractor.

THE Wall is no care to be thoroughly miled with control of the said form of the property of the said form of

work the spritten of the first part hereby agrees, who the spritation of the said period of six months, profect that the said carringsway shall at that time he in good order, which fact shall be determined by a certificate to that effect, signed by the engineer in charge, to pay to the said party of the second part the whole or such part of the sum last aforesaid as may remain after the expenses of making the said repeirs in the manner aforesaid shall have been paid therefrom.

(B) And the said party of the second part hereby covenants and agrees that he will not sell, or permit to be removed from the line of the work, before the tranch shall have been refilled, say building sand or cert thrown up, axcept upon the written permission of said commissioner, and then coly so much as shall ramain, after reserving a sufficient paying; but that he will in all cases reall the trench with the same materials thrown out, provided the good sains gravet proceder of mul. that then the same saall be removed from the ground and good clean earth proched and used for refilling the trench, and sand of proper quality and depth spread on the surface to receive the repairement.

(C) The said party of the second part further agrees that the return of the engineer, to be appointed by the Commissioner of Public Works to survey the work, shall be the account by which the amount of materials furnished and work done shall be computed, and that the same has been faithfully performed in accordance with the right of the said party of the sead party of the sead party of the sead party of the second part for any work upon, in, or about the said work as extra work, unless ordered in writing, by the Commissioner of Public Works to do the same as extra work, unless ordered in writing, by the Commissioner of Public Works to do the same as extra work, unless ordered in writing, by the Commissioner of Public Works as the said surfus of the same has been faithfully performed in accordance with the spread on the said party of the second part hereby fu

pense of said labor and materials to the aforesaid contractor, and the expense so charged shall be deducted and paid by the parties of the first part out of such moneys as may be then due, or may at any time thereafter grow due, to the said contractor under and by virtue of this agreement, or any part thereof; and, in case such expense is less than the sum which would have been payable under this contract if the same had been completed by said contractor, he shall be entitled to receive the difference, and in case such expense shall exceed the last said sum, he shall pay the amount of such excess to the parties of the first part on the notice from the said commissioner of the excess so due.

part on the notice from the said commissioner of the excess so due.

(G) And the said party of the second part hereby further agrees that he will give his per-sonal attention constantly to the prosecution of the said work; that he will not assign or sublet the aforesaid work, but will keep the same under the aforesaid work that he will heep the same under his own control; and that he will punctually pay the workmen who shall be employed on the aforesaid work, and n.t in what is denominated storepay; and that he will furnish the said Commissioner of Public Works with satisfactory evidence that all persons who have done work or furnished materials under this agreement, or who may have received or sustained any damage or injury through or by reason of any act or omission, carelessness, or want of skill on the part of said contractor or his agents in the prosecution of the work aforesaid, and who may have given written notice to the said commissioner before or within ten days after the completion of the work aforesaid, that any balance of such work or materials, or compensation for such injury or damage, is still due and unpaid, have been fully paid or secured therefor.

said, that my balance of such work or materials, or compensation for such injury or damage, is still due and unpaid, have been fully paid or secured therefor.

And in case such evidence be not farnished as a foresaid, such amount as may be necessary to meet the claims of the persons aforesaid shall be retained from the money due the said or part of the second part, under this agreement, until the liabilities aloresaid shall be fully discharged or such notice withdrawn.

(H) The said party of the second part hereby further agrees to sustain, by timbors and sufficient chains, all the main and service water-pipes i which may be affected in any manner by the work under this agreement, in their places, without in jury; or, failing to do so, the said commissioner shall be, and he is hereby, authorized to replace it them, and recaulk and repair the same immediately and repair the same immediately in the coast thereof shall be charged to the said commissioner by him before the work to be add party of the second part shall be paid to the said commissioner by him before the work to be add party of the second part shall be paid to the said commissioner by him before the work to be added to the said party of the second part shall be charged to the said party of the second part shall be charged to the said party of the second part shall be charged to the said party of the second part shall be charged to the said commissioner by him before the work to be added to the said party of the second part further agrees to do everything necessary to support the same shall be considered a part of the agreement.

(1) And the said party of the second part further agrees to the constantity on the ground, and to have a sufficient lights on or realitive to the constantity on the ground, and to have a sufficient quantity of timber and plank constantly on the ground, and to have a sufficient quantity of timber and plank constantly on the ground, and to have a sufficient lights on or the same as required, for bracing and sheet in part of the

near the work, and keep them burning from twilight until sunrise.

And the said party of the second part further
agrees to give notice in writing at least twentyfour hours before breaking ground, for the purpose of constructing the work hereinbefore mentioned, the such and all such gas companies as
have, or may during the progress of the work
have, any gas-pipes which may be affected by
such excavations as may become necessary.

And it is further agreed that the said party of
the second part shall not cause any hindrance to
or interference with any such gas company or companies in protecting their said pipes, nor in removing or otherwise protecting and replacing the
main and service pipes, lamp-posts and lamps,
where necessary; but that the said party of the
second part will suffer the said company or companies to take all such measures as may become
necessary for the purpose aforesaid.

And it is hereby further agreed that in case any
damage or injury shall or may result to said pipes,
lamp-posts, lamps and other works of any gas
company, through or by reason of any negligence,
carelessness or want of skill on the part of the
second part shall become liable to pay such
amount as shall or may be sufficient to cover the
expense and damage eccasioned by such negligence, carelessness or unskillviness; and such
amount shall be charged against the said party of
the second part, and may be deducted from any
sum or sums due or payable to said party of the
second part, and may be deducted from any
sum or sums due or payable to said party of the
second part, and may be onceauence of
any negligence in guarding the same, or any improper materials used in its construction, or by or
on account of any act or omission of the said party
of the second part, his servants or agents, in the construction of said work, or by or in consequence of
any negligence in guarding the same, or any improper materials used in its construction, or by or
on account of any act or omission of the said party
of the second part

of

For furnishing and laying the foundation plank and timber, where directed, the sam of thirty dollars will be allowed for each one thousand feet For concrete made, as described to those specifications, and half where directed, the wars of five dollars per cubic yard will be allowed, excepting where such concrete is shown on the phas, as part of the section of the section where the phase it is to be considered as belonging to and a part of the sewer.

be considered as belonging to and a part of the sewer.

For rock-excavation, where drilling ness biasting is necessary, the sum of four dollars por cubic yard, and for excavating the same without biasting, when so-directed by said commissioner, to grevens, injury to the main water-pipes, the sum of five dollars per cubic yard, in each case the measurement to be as hereinbefore specified; these prices to include the removal of the rock excavated from the line of the work. No soft or disintegrated rock, which may be removed with a pick, and no bowlders or loose rock in rock fillings, or rock on the exterior of the lines of said measurement which may have been previously leosened in excavating trenches for water-pipes or leosened in excavating trens

measurement which may have been previously leosened in excavating trenches for water-pipes or other purposes, to be measured or allowed for as rock.

And the said party of the second part further agrees that he shall not be entitled to demand or receive payment for any portion of the aforesaid work or materials-until the same shall have been fally completed in the manner set forth in this agreement, and such completion duly certified by the engineer and by the inspector appointed by the said commissioner to examine the interior of the said commissioner to examine the interior of the same, and each and every of the stipulations hereinbefore mentioned are complied with, and such completion, duly certified by the inspectors employed on the work; and by the water-purveyor or other officer designated by the commissioner of public works, whereapon the parties of the first part, under section 4 of chap. 380, laws of 1812, will pay, and hereby bind themselves and their successors to pay, by the said party of the second part, in cash, or in five-year assessment bonds, bearing interest at the rate of soven per cent. per annum, at the option of the compiroller, within thirty-five days from the time of completion and acceptance of, the work by the commissioner of public works, the whole amount of money accruing to the said party of the second part, under this contract, excepting such sam or sums as may be lawfully rotained under this contract be five thousand dollars or over, payments will be made to the said party of the second part by monthly installments of soventy per cent, on the amount of work performed under and in accordance with the provisions and stipulations of this agreement, in conformity with and subject to the terms and conditions of an ordinance of the mayor, aldermen and commonalty of the city of New York, passed December 30, 1834, untitled "An ordinance to authorise the issue of bonds upon contracts, payable by assessments, in pursuance of the acceptance on the whole or any portion of the acceptance of th improperly given.

In witness whereof the parties to these presents have hereunto sat their hands and seals the day and year first above wriften.

For the mayor, aldermen and commonality of the city of New York.

Signed and sealed in presence of—

whereas the above bounden — , by instrument in writing, under — hand and seal, bearing even date with these presents, — contracted with the said mayor, aldermen and commonally to furnish all the materials and labor, excavate for, build, construct, and in all respects complete, in the manner, on the conditions, and not the considerations in the annexed and preceding contract mentioned and contained, sewers in Ninety-fifth and Ninety-eighth streets, between First and Third avenues, and in First avenue, be-tween Ninety-fifth and One hundredth streets, with branches.

Now, therefore, the condition of the above obli-

Now, therefore, the condition of the above obli-gation is such, that if the said — shall well and truly, and in good, sufficient and work-manlike manner, perform the work mentioned in the aforesaid contract, and complete the same in accordance with the terms and provisions therein stipulated, and in each and every respect comply with the conditions therein contained, then this obligation to be void, or else to remain in full force and virtue.

Signed and sealed in presence of—

Voucher.	Amount
1	
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֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	

eighth streets, between First and Third avenues and in First avenue, between Ninety-fifth and One Hundredth streets, with branches:

Assigned to \_\_\_\_\_.
Approved as to form.

teenth, Fifteenth, Sixteenth, teeth, Twenty-first and Twenty-second streets west.

Very respectfully,

Per S. H. T. 59 H street.

A. R. Shepherd, esq., Vice President Board of Public Works.

Chaning ham, select streets where this is most needed.

A. R. S.

No. 5804 (Board of Public Works, vol. 2) 1873.

No. 5804 (Board of Public Works, vol. 2) 1873.

Colton, H. V., 59 H street. Proposal to furnish, and put up complete, fence similar to that on New York avenue, west of Ninth, at forty cents per linear foot, giving a list of streets. C. L. B., vol. ume 4, 1873, p. 888.

inear foot, giving a list of streets. C. L. B., volume 4, 1873, p. 888.

BOARD OF PUBLIC WORKS, DISTRICT OF COLUMBIA, WASHINGTON, July 3, 1872.

Respectfully referred to Mr. Cunningham, who will select streets where this is most needed.
By order of the Board: Chas. S. Johnson, O. K.

Assistant Sceretary.

Respectfully returned, with recommendation that Massachusetts avenue, from Fourteenth to Ninth, on north side, and from Eleventh to Ninth on south side; New York, from Seventh to First street northwest, on both sides; Twentisch, Twenty-first and Twenty-second streets, from Pennsylvania avenue to F street northwest, is about all that are in need of fencing.

July T.

Chas. W. Cunningham, Inspector.

it was one of the prominent features in the last investigation. Of course, as the executive officer of the board, I felt a special interest in having the work thoroughly done, so that the plan which we had adopted of getting rid of the old pest, the old canal, and putting a sever alongside of it, would be a successful experiment. I went daily along the work, sometimes with the engineer and sometimes with other members of the board. The bricks that were used, in

went daily along the work, sometimes with the engineer and sometimes with other members of the board. The bricks that were used, in some cases, were of a light color. I suppose I have broken hundreds of them, but on breaking them I found that inside they were good rod brick—solid brick; and the fact that the sower stands to day, after having been in operation for two or three years, and after it has been inspected by persons in the employ of the board by going in and through it, is good evidence that the work was well done.

Q State the facts in regard to the Seventh street and Bladensburg road? A. The Bladensburg Asignoted as to form.

State the facts, in regard as The interest of the comprehensive and the property of the comprehensive and the property of the comprehensive as a follows: I state which did not come under more as follows: I state which did not come under the was a marker which did not come under the was a follows: I state which did not come under the was a follows: I state which did not come under the was a follows: I state which did not come under the was a follows: I state which did not come under the was a follows: I will call attention to the fact that was a follows: I will call attention to the fact that the property-obliders prefer dear follows: I will call attention to the fact that the property-obliders prefer the had done some \$4,000 or \$4, All loss or damage arrising out of the same in provided in sections 10 to flew swet to the does named this generated, the same of the sweet to the same of the sam

of the advisory board withdrew. Journal A, 1872, p. 78.
February 29: General J. K. Barnes was advised that samples of wood presorved by different processes were ready for the test proposed by him, and was requested to designate some person to make the chemical analysis. Journal A, 1872, p. 87.
March 1: Dr. B. F. Craig, chemist, Army Medical Museum, was informed that Surgeon General Barnes had designated him to make the chemical analysis of specimens of preserved wood, which specimens, fifteen in number, were forwarded to him. Journal A, 1872, p. 89.
The original papers, relative to the various methods of preserving wood—samples of which have been forwarded—were transmitted to Dr. B. F. Craig, United States army, for his information, the sante to be returned to this office for file. Journal A, 1872, p. 88.

May 9—The able, comprehensive and exhaustive report on the different processes of preserving wood was received from Gen. J. K. Barnes, and the thanks of the beard were were treasured.

May 19—John O. Evans was awarded a contract for paving Pennsylvania avenue, from Eighteenth street to Rock creek, and on Aqueduct and Bridge streets, Georgetown, to High street, with the Hallard or iron-wood pavement; blocks to be 3½ inches deep, and to be treated by the "Seely process," at 83,50 per square yard complete. (Journal A. 1872, p. 313.)

May 13—The advisory board of engineers was requested to meet with the board on the 15th instant at 2 o'clock p. m. (Journal A, 1872, p. 218.)

Instant at 2 o'clock p. m. (Journal A, 1872, p. 218.)
May 15—Generals Barnes, Melgs and Babcock, of the advisory board of engineers, were present by appointment for the purpose of considering the report of Drs. Craig and Tilden upon the specimens of preserved wood submitted to them for chemical analysis for report of the advisory board of engineers. (See p. 228, Journal A, 1872.)

The Witness, I will state that the advisory beautievisted of Canana Humanhama (Shin) O. K.

Respectfully returned, with recommendation that Massachusetts avenue, from Fourteenth to Ninth, on north side, and from Eleventh to Ninth on south side; New York, from Seventh to First street northwest, on both sides; Twentich, Twenty-first and Twenty-first and Twenty-first and Twenty-first and Twenty-first and Twenty-first and Italian are in need of fencing.

OHAS. W. CUNNINGHAM, Inspector.

July 7.

Give order for this also: Sixteenth street, from L to R street.

Is this Sixteenth street, from S to R, or L to R streets.

Is this Sixteenth street, from S to R, or L to R streets.

That is the history of that fence question.

By the Chairman: Q. State your knowledge of the character of the bricks used in the B street sewer; whether at any time you inspected the same! A. I carefully inspected those bricks every day, for it was a sewer in which I felt a special interest, as the filling up of the property-holders on the various streets in re
The Witness. I will state that the advisory board consisted of General Humphreys, Chief tengineer of the Army, General Meigs, Quarter master General, the man who built this building, and General Barnes, Surgeon-General, and General Barnes, General Meing, and General Barnes, Surgeon-General, and General Barnes, General Meing, and General Barnes, Genera

bricks every day, for it was a sewer in which I felt a special interest, as the filling up of the canal and the building of a sewer alongside of it was one of the prominent features in the last investigation. Of course, as the executive officer of the board, I felt a special interest in having the work thoroughly done, so that the plan which we had adopted of getting rid of the old pest, the old canal, and putting a sewer alongside of it, would be a successful experiment. I went daily along the work, sometimes with the engineer and sometimes with other members

payement by continued on this street. No. 2023 tool. Cl. 1873.

I street, between Sevenjeenth and Eighteenth treets—March 17, 1873. Lieutenant Noonan and J. Redfern requested that this street be payed with wood. No. 2113, vol. A, 1873.

Fifth street, between Nuth street and New York avenue—August 2, 1873. I. Ball et al. asks that this street be payed with blocks of wood. No. 6124, vol. C, 1873.

B street southwest—March 25, 1873. B. B. Donaldson et al. requests that this street be laid with atone or some other good block payement. No. 2571, vol. A, 1873.

Alley in square 700—April 2, 1872. E. Thompson et al. requested this alley be payed with round-block payement. No. 2594, vol. A, 1873.

April 8, 1873. W. M. Galt wants Morse wood payement. No. 2709, vol. A, 1873.

B, between Fourth and Fith streets, southeast—November 20, 1873. E. T. Bowen requested that this street be payed with wood payement. No. 13041, vol. D, 1873.

West, between Washington and High—April 10, 1873. H. H. and J L. Simms want this street laid with wood, instead of concrete. No. 2832, vol. A, 1873.

with the supplies of the series of the serie

It reads as follows:

OFFICE OF THE BOARD OF PUBLIC WORKS, }
CITY HALL, CHICAGO, October 1, 1873. }

Mesers, Ray & Whitney:
CHEVILIEURS: In answer to your inquiry regarding quantity, condition, &c., of the "ironized wood pavement" in this city, I would say there has been about 100,000 square yards laid in this city since the fall of 1890. The pavement at present time is in apparent good and sound condition. It has been in use so short a time that we have had only a limited experience with it, and in consequence are unable to form any accurate opinion in regard to the lasting qualities of the process. Can only say that the pavement is now in good condition.

W. H. CARTER, R. PRINDIVILLE, J. K. THOMPSON, GEO. W. WILSON. Respectfully, No. 12354. (B. of P. W., Vol. 4.) 1873.—2079. Chicago, Illinois, October I, 1873. Carter, W. H., and others, commissioners: State, in reply to inquiry relative to the ironized wood pavement, that there has been about 190,000 square yards laid since fall of 1859, and that it is now in good condition; that, in consequence of the short time it has been down, they have only a limited experience with it.

I. Twenty-four thousand yards.

By the Chairman: Q. I will ask you to state

known it, they never would have laid a foot of pavement in Washington.

Q. But still they seemed to think that the price would justify them in paying 50 cents per square yard for securing the contract? A. Well, Mr. Chairman, it strikes me that that was based upon the idea that they would form was based upon the idea that they would form connections here which would enable them to lay their pavement in a cheap manner. Looking at it from this standpoint, that is my firm impression; that they thought, through the agency of my partner, they had secured my influence, which would enable them to lay a cheap pavement in this city, in which impression they found they were mistaken, very much to their cent.

to their cost.

Q. State the circumstances under which a A. I have numerous propositions from O'Conner & Shanley!

offers if you desire it. The documents were read by the Governor, as follows: read by the Governor, as follows:

To the Honorable Members of the Board of Public Works of the District of Columbia:

Sins: The undersigned hereby propose to lay two hundred thousand square yards of wooden pavement—treated blocks—of such style or patent as may be approved of by the Board of Public Works of the District of Columbia, the work to be commenced as near the list of April next as the weather will permit, and be completed by or before December following, provided the streets are duly prepared for the pavement. The price to be three dollars and fifty cents (\$3.50) per square yard for treated blocks. three deliars and fifty cents (\$3.50) per square yard for treated blocks.

We respectfully refer you to the accompanying papers as to our ability to fulfill any contract that may be awarded us.

THOWAS O'CONNOL.

MICHAEL SHANLEY.

BERNARD M. SHANLEY.

MARCH 17, 1873.

NEWARK, N. J., March 15, 1872.
GRATLEMEN: Messrs. Michael Shanley & Son, contractors, of this city, are desirous of engaging in work upon your streets, and, having known them many years, I can certify to their responsibility and fitness to carry on the business they are engaged in. They stand high in this community, and I am satisfied they will carry out any engagements made by them.

Respectfully yours,

Marcus L. Ward.

To the Board of Public Works, Washington, D. C.

To the Board of Public Works, Washington, D. C.
NEWARK, N. J., March 14, 1872.

GENTLEMEN: M. Shanley & Son, of this city,
contractors, want to engage in work in your city;
they have had an account in this bank about ten
years, and always been prompt in their engagement, and own real estate, and any contract they
undertake we believe they will do satisfactorily.

S. H. PENNINOTON, President.

A. BALDWIN, Cashler.

To the Board of Public Works, Washington, D. C.

(Indorsement.) March II, 1872.

No. 2004, (B. of P. W., vol. 1,) 1873.

O'Connor, Thomas: Shanley, Michael: Shanley, Bernard M. Proposals to lay wood pavement, treated, at \$4.50 square yard. Testimonials of A. Baldwin and Hon. Marcus L. Ward, inclosed. On the 8th of July they made another propo-

sition:

No. 867 BROAD STREET, 
NEWARK, N. J., July 8, 1872.

Sirs: We propose to lay tweaty-five thousand (25,000) yards of trap-block pavement, in accordance with printed specifications, in such street or streets as you may select, for the sum of three deliars and fifty cents (25,00) per square yard, and to finish and complete the same within two months after contract is signed.

Also to lay twenty-five thousand square yards of wooden pavement within the same time, and at Also to lay twenty-five thousand square yards of wooden payonent within the name time, and at the price fixed therefor, propared blocks by the Robbins process to be used.

Thomas O'Connor,
Michael Shanley,
Bernand M. Shanley.

The Board of Public Works, Washington, D. C.

The Board of Pastic Works, Wakangton, D. C.
[Indorsement.]
Newalks, N. Jr., July 8, 1873.
No. 6103, (B. of P. W., vol 2,) 1873.
U'Uennor, Thomas; Shanley, Michael; Shapley,
Bernard M. Request the contract for laying
50,000 yards wood parement. Then on July 10, 1873, they made the following proposition:
WASHINGTON, D. C., July 18, 1872.

WASHINGTON, D. C., July 10, 1873.

GENTLEMEN: The undersigned respectfully propose to lay twenty-five thousand yards of square-block wood pavement, as may be approved by the board, at the price of \$4.50 per square yard. Also twenty thousand square yards of Belgian stone pavement at the price of \$4.50 per square yard. We respectfully ask your early consideration of the above. Very respectfully,

To the Hon. Board of Public Works of the District of Columbia.

On the 12th of July a contract was awarded these parties, as follows: Mark reply No. 5868, vol. 2, 1873. Mark reply No. 5868, vol. 2, 1873.

BOARD OF PUBLIC WORKS.

DISTRICT OF COLUMBIA.

GENTLEMEN. WASHINGTON, July 12, 1873.

form you that a offm directed by the board to infor laying 25,000 yards the board as infor laying 25,000 yards the board series of the laid upon such streets as may hore ger be designated, at the board rates as established. The navening to be in full accordance with the specifications of the patent; to be treated by the Seley or Robbins process. The treatment of the wook to be under the inspection of the board at the mills. Also, that a contract will be awarded you for laying 10,000 yards of Beigian stone pavenent of the New York specification pattern, at the prices established by the board. You will notify the board whose you are prepared to commence the work.

By color of the board.

dertook.

By Mr. Wilson: Q. Did you ever designate the street on which that 25,000 yards was to be laid? A. No, sir, there was never anything

be laid? A. No, sir; there was never anything done about it.

Q. Did not they ask you in that letter to designate the street? A. Yes, sir; but they never came to have the street designated, and never sent the material or sent anything else to begin the work.

Q. They could not very well do that until they knew— A. If they had had any dispo-sition to do the work they would have found out the streets without any difficulty. There were plenty of streets ready for them.

were pienty or streets ready for them.

The Chairman. State the circumstances connected with the filling of the Washington canal, and the benefit derived therefrom to the Government, and how much was paid for filling by the Government.

Mr. Wilson. First let me ask what is the By order of the board. Frank T. Howe, chief clerk.

Respectfully returned to B. P.W. for file, Adolf Cluss, engineer in charge. January 5, 1874.

I would state further, in this connection, that the board were very anxious to get the work done which they had undertaken. The streets were cut up, and upon this presentation of the case they-did not think they would be justified in preventing these parties from at least laying down as much as they had proposed and were ready to do.

By Mr. Wilson. First let me ask what is the date of that award! A. The award was the 12th of July, 1873, this letter bears date at Washington. You see they say they will be ready to proceed with the work or before the 5th of August, and add "will you do us the favor to designate the street that we may make preparations to commence the work at once, and we agree to finish the same in sixty days." That is signed by O'Connor and Shanley. What kind of a response did you send! A. I think that was presented in person, and I told them as soon as they were

person, and I told them as soon as they were ready to go work the street would be desig A. Twenty-four success of a By the Chairman: Q. I will ask you to state your own opinion as to the reasonableness of a price for pavement which would allow a bonus of fifty cents a square yard to secure a contact they might get ready to go to work! A. I do not think that they could allow I twas just that way. If they had made any tract? any bonus to be paid if their work was properly done and they guaranteed it for three years.

Q. But they did propose to pay a bonus in the very beginning? A. Weil, that was a thing of which I knew nothing at all, and had ing made any preparation, or done anythin preparation to go on with their work; shown any material or anything of that kind, I should show that they were prepared to commence the work, it was a thing I would not do.

Q. Would it not have been a very easy matter to imideate to them a certain street that you desired to have paved, and then let them go out

A. I indicated to them that the moment they had material to go on with their work, the street would be designated. Q. What disadvantage would it have been to Q. What disadvantage would it have been to designate the street them, and let them prepare their material? Was not that a reasonable request A. It was a reasonable request, provided they had the materials here ready to go on with the work. The streets were being prepared; there were a dozen streets cut up at that time, ready for the pavement.

Q. How were the streets being prepared? A. Why, by having the curb set, the footwalks laid, and the grading done.

By the Chairman: Q. I forgot to ask you if you saw Mr. Kirtland in connection with this pavement. A. No, sir; I never heard of Mr. Kirtland, as I stated before, until I heard of him

Kirtland, as I stated before, until I heard of him here.
Q. You didn't hear of him in connection with

this pavement? A. No, sir; I had no idea that he knew the parties, or that there was such a person.

Q. What are the circumstances connected with the Washington canal? A. The circumstances connected with the Washington canal are simply these: The board determined to fill it up, and build a sewer alongside of it. On that they noted \$1529.316.80. that they paid \$123,316.50.
Q. For filling itf A. Yes, sir; and the law which made an appropriation for filling it up gobbled up the land which was reclaimed,

amounting to more than 2,300,000 feet.

Q. What do you me in by "gobbled up?" A'
They quietly took possession of it. It was
land which belonged to the city of Washington.

Q. Who took it! A. The United States Government. The act making the appropriation for this filling of the canal provided that all land reclaimed should belong to the Govern-

land reclaimed should belong to the Government of the United States.

Q. Have you the cost to the city of that filling—to the District—to the Board of Public Works? A. Well, it was simply a dumping ground to get rid of the dirt which we were carrying off from the streets. It was a dumping ground for the various streets which we were improving. The earth was dumped there.

Q. Then you kept no account of the cost of filling up at ail? A. No, sir.

Q. Had this canal been filled up before the appropriation had been made? A. It was then in the process of filling.

Q. Where is that act? A. It was passed along in May or June, 1872.

Mr. Stanton. [Handing the act to the chairman.] It was passed May 18, 1872.

The Chairman. I will read it, so that it may appear in this connection.

The act was then read as follows:

Ax Acr making appropriations for sundry civil

The act was then read as follows:

Ax Act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1873, and fur other purposes.

To pay the Board of Public Works of the District of Columbia the propertion of the costs properly payable by the United States Government for the filling of the canal from Seventh street west to Seventeonit street west, and of the cost of the intercepting sower along the canal adjoining the property of the United States Government, said work being under the direction of the Board of Public Works, \$8,365, or so much thereof as may be necessary: Provided, That all payments made under this and the preceding appropriation shall be made only upon vouchers approved by the officer in charge of the public buildings and grounds of the District; and no portion of the money herewith appropriated shall be used by the Board of Public Works for any other purpose whatever than the purpose that is named in the said two last paragraphs. And the land made by the filling up of the said canal is hereby declared to be the property of the United States. And the said appropriations shall not be coastrued to create or imply any obligation on the part of the United States in any respect whatever in future.

[To be concluded to-morraw.] NEW ADVERTISEMENTS.

Latimer & Cleary offer for sale superior assort nent of boots and shoes on Saturday morning. B. H. Warner will sell valuable real estate at B. H. Warner will sell fire-proof safe, jewel-uniontown, on Wednesday, May 27, by virtue of a deed of trust.

Duncasson Bros. will sell fire-proof safe, jewel-ers' tools and machinery, and balance of stock, at sell Pennsylvania avenue, to-day, May 8.

Green & Williams will sell building lot on Me-

idian Hill, on Wednesday, May 13. Old Dr. Darby—confidential medical treatment. Bogan & Wylie—cheap fry goods, dress goods to; one price.

Thos. E. Waggaman wants sewer bonds.

Furnished and unfurnished rooms for rout, at 75 I street northwest. Herman Linderman prays to have patent exended. Notice of decree of Supreme Court—case of

Disney vs. Wheeler. Michael Mandel is wanted before the Supreme Court within forty days,
Large assortment of barriages for sale by Robt.
H. Graham. A great variety of new books at W. H. & Q. H.